

NOTES ON SOME HOLOCENE SHELLS FROM IGHTHAM.

By A. S. KENNARD, F.G.S., and B. B. WOODWARD, F.L.S.

Read 8th March, 1907.

In 1902 an early interment was exposed in Stanley's Quarry, Ightham. This quarry is situate on the opposite side of the valley of the Shade to the quarry in which are situated the well-known Ightham fissures that have yielded so many Pleistocene vertebrate remains. The remains of three earthenware vessels and portions of a human skeleton were found in the grave. The age of the interment is a little uncertain. The pottery exhibits no traces of Roman influence whatever, and may well be late Celtic or early Iron age. At the same time it must be remembered that similar pottery is often found with Roman remains, so that it is perhaps safer to consider the interment as of early Romano-British age. The fragmentary remains of the human skeleton probably belonged to a woman, but it is impossible to speak definitely on this point. The skeleton was found about three feet away from the pottery. There were no traces of any calcined bones.

The grave had been formed by heaping up pieces of Kentish Rag on the old surface soil to a height of about six feet. The molluscan remains were obtained from the old soil at the base of the grave. The species are:—

<i>Vitrea cellaria</i> (Müll.)	...	...	...	Common.
<i>V. nitidula</i> (Drap.)	...	...	...	Common.
<i>V. crystallina</i> (Müll.)	...	...	...	Common.
<i>V. alliaria</i> (Müll.)	...	...	...	One example.
<i>Pyramidula rotundata</i> (Müll.)	...	...	...	Common.
<i>Hygromia hispida</i> (Linn.)	...	...	...	Common.
<i>H. rufescens</i> (Penn.)	...	...	...	Common.
<i>Helicella itala</i> (Linn.)	...	...	...	Five examples.
<i>Helix aspersa</i> , Müll.	...	...	...	Two examples.
<i>H. hortensis</i> , Müll.	...	...	...	Three examples.
<i>H. nemoralis</i> , Linn.	...	...	...	Common.
<i>Helicigona arbustorum</i> (Linn.)	...	...	...	Two examples.
<i>H. lapicida</i> (Linn.)	...	...	...	Two examples.
<i>Cochlicopa lubrica</i> (Müll.)	...	...	...	One example.
<i>Azeca tridens</i> (Pult.)	...	...	...	Two examples.
<i>Carychium minimum</i> , Müll.	...	...	...	Three examples.
<i>Clausilia laminata</i> (Mont.)	...	...	...	Three examples.
<i>Cæcilioides acicula</i> (Müll.)	...	...	...	One example.
<i>Pomatias elegans</i> (Müll.)	...	...	...	Common.

It is not often that we are able to fix with anything approaching accuracy the age of a holocene deposit. Hence the importance of these shells. The close proximity of the Ightham fissures enables us to make a comparison with the Pleistocene molluscan fauna of the district. There are sixteen species which have apparently existed in the district from Pleistocene times:—*Vitrea cellaria*, *V. nitidula*, *V. crystallina*, *V. alliaria*, *Hygromia hispida*, *H. rufescens*, *Pyramidula rotundata*, *Helix nemoralis*, *H. hortensis*, *Helicigona lapicida*, *H. arbustorum*, *Cochlicopa lubrica*, *Carychium minimum*, *Cæcilioides acicula*, *Clausilia laminata*, and *Pomatias elegans*. Of these *Vitrea nitidula* is far more abundant in the tumulus and living than it was

in the Pleistocene deposit, whilst the holocene and recent examples of *Helix nemoralis* and *H. hortensis* are by no means so fine as the older specimens. Four species occur in the Pleistocene, but are unknown later—*Pyramidula ruderata*, *Hygromia umbrosa*, *Jaminia muscorum*, and *Succinea oblonga*. One species, *Helicella itala*, occurred in the Pleistocene and in the tumulus, but is quite extinct in the neighbourhood at the present day. *Helix aspersa* occurred in the tumulus, but not in the Pleistocene, and is of course too abundant living, whilst *Helicella cantiana* must be considered a recent immigrant, since it is absent from both deposits, though common living. The band formulæ of *Helix nemoralis* from the tumulus are:—

1 2 3 4 5	...	...	...	...	...	Nineteen examples.
0 0 0 0 0	...	...	...	...	...	Eight examples.
0 0 3 0 0	...	...	...	...	...	Three examples.
(1 2 3)(4 5)	...	...	...	...	...	Two examples.
1 2 3 (4 5)	...	...	...	...	...	Five examples.
0 0 3 4 5	...	...	...	...	...	One example.
0 0 3 4 0	...	...	...	...	...	One example.

These figures are very similar to those of the Pleistocene examples, the only noticeable difference being that 0 0 3 0 0 was far more abundant in Pleistocene times than later. The example of 0 0 3 4 5 is perhaps noteworthy, for this is a rare mutation in England, though far more common in the west of Ireland. The band formulæ of *Helix hortensis* from the tumulus are:—

1 2 3 4 5	...	...	...	...	...	Two examples.
0 0 0 0 0	..	...	...	...	...	One example.

We have to tender our best thanks to Mr. Benjamin Harrison, of Ightham, for kind assistance during the examination of the tumulus.

ALLENS FARM, IGHTHAM.

Mr. F. J. Bennett, F.G.S., kindly forwarded us some material from a holocene deposit situate on Allens Farm, Ightham. Although the exact age of the deposit is uncertain, yet the contained mollusca are of some interest. Twelve species were noted:—

<i>Limax arborum</i> , Bouch.-Chant.	...	...	...	Six examples.
<i>Arion ater</i> (Linn.)	...	...	...	Common.
<i>Vitrea cellaria</i> (Müll.)	...	...	...	Four examples.
<i>Hygromia hispida</i> (Linn.)	...	...	...	One example.
<i>Vallonia pulchella</i> (Müll.)	...	...	...	One example.
<i>Pyramidula rotundata</i> (Müll.)	...	...	...	Common.
<i>Helix nemoralis</i> , Linn.	...	...	...	Fragments.
<i>Vertigo pusilla</i> , Müll.	...	...	...	One example.
<i>Carychium minimum</i> , Müll.	...	...	...	Common.
<i>Acicula lineata</i> (Drap.)	...	...	...	Two examples.
<i>Limnaea truncatula</i> , Müll.	...	...	...	Two examples.
<i>Pisidium casertanum</i> (Poli)	...	...	...	One valve.

Of these the two most noteworthy forms are *Acicula lineata* and *Vertigo pusilla*, both of which are extremely rare in Kent in a living state, whilst it may be noted that both these species, as well as *Limax arborum* and *Arion ater*, are absent from both the tumulus and the Pleistocene of the fissure.